

SoilCET 2024 - PROGRAMME



With the support of:



Wednesday January 24 (1 p.m – 6.40 p.m)

- 1.00 p.m – 2 p.m *Registration in front of amphitheater Dhalias (-1 floor) & Welcome coffee*
- 2.00 p.m – 2.15 p.m Opening address in amphitheater Dhalias (-1 floor)
- 2.15 p.m – 2.45 p.m Inaugural conference
Cornelia Rumpel
- 2.45 p.m – 3.00 p.m Applications of the “4 per 1000” Initiative
Paul Luu

SESSION 1: QUANTIFICATION OF ORGANIC CARBON AND CHARACTERISATION OF SOIL ORGANIC MATTER AT PLOT AND REGIONAL SCALES

Chairpersons: **Emmanuelle Vaudour & Sergio Saia**

- 3.00 p.m – 3.40 p.m Keynote speaker: **Tiphaine Chevallier**
QUANTIFICATION AND CHARACTERISATION OF SOIL CARBON AT DIFFERENT SCALES
- 3.40 p.m – 4.00 p.m SENTINEL-2/1 BARE SOIL TEMPORAL MOSAICS OF 6-YEAR PERIODS FOR SOIL ORGANIC CARBON CONTENT MAPPING IN LA BEAUCE, CENTRAL FRANCE
Emmanuelle Vaudour
- 4.00 p.m – 4.20 p.m APPLICATIONS OF INFRARED SPECTROSCOPY TO QUANTIFY AND CHARACTERIZE SOIL ORGANIC CARBON
Aurélie Cambou
- 4.20 p.m – 4.25 p.m PRESENTATION OF INTERNATIONAL RESEARCH CONSORTIUM ORCASA
Mathieu Noguès
- 4.45 p.m – 4.55 p.m: *Presentation of International Research Consortium ORCaSa (in front of Poster*
- 4.25 p.m – 5.20 p.m  **Coffee Break**
 **Stand visit**
 **Poster session**

Presented by	Poster title
Maria ROMERO-SARMIENTO	Rock-Eval® device for characterization of environmental samples: methods, insights, and applications.
Adrien WATTRIPONT	Carbon Farming practices verified by Rock-Eval soil analysis
Lucas POULLARD	Effects of mechanical site preparation techniques in forest plantation context on the soil organic carbon stocks and on the priming effect process.
Stéphanie OUVRARD	Assessment of C storage of a Technosol under short rotation coppice management
Brieuc HARDY	The SOC:clay ratio – a measure of the organic carbon saturation of soil indicative of its potential structural stability
Imran Ahammad SIDDIQUE	Assessing the carbon fluxes in perennial and annual cropping systems using both automatic and manual chamber methods

- 5.20 p.m – 5.40 p.m PROPOSITION FOR A METHODOLOGICAL FRAMEWORK AND PROTOTYPE MRV TOOL FOR CROPLAND C STOCK CHANGE ASSESSMENT AT HIGH RESOLUTION OVER LARGE REGIONS
Eric Ceschia
- 5.40 p.m – 6.00 p.m CHANGES IN SOIL ORGANIC CARBON CONTENT UNDER ANNUAL AND PERENNIAL CROPS, AND RELATED AGRICULTURAL PRACTICES AS OBSERVED FROM A LARGE SCALE ON-FARM STUDY IN SWITZERLAND
Pascal Boivin
- 6.00 p.m – 6.20 p.m ADJUSTMENTS OF THE ROCK-EVAL® THERMAL ANALYSIS FOR SOC AND SIC QUANTIFICATIONS
Joséphine Hazera
- 6.20 p.m – 6.40 p.m QUANTIFICATION OF BIOCHAR IN ARABLE LAND: A NEW APPROACH WITH ROCK-EVAL® THERMAL ANALYSIS
Marie-Liesse Aubertin

Thursday January 25 (8.30 a.m – 5.40 p.m) – Cocktail Reception (from 19p.m)

8.30 a.m – 9 a.m **Welcome coffee**

SESSION 2: STABILISATION OF SOIL ORGANIC MATTER: A CENTRAL PROCESS IN C-STORING AGRICULTURAL PRACTICES

Chairpersons: Isabelle Basile-Doelsch & Patricia Garnier

- 9.00 a.m – 9.40 a.m Keynote speaker: **Claire Chenu**
STORING ADDITIONAL CARBON IN SOIL: DIFFERENT PRACTICES, DIFFERENT STABILITIES OF THE ORGANIC MATTER?
- 9.40 a.m – 10.00 a.m ABOUT SOME CURRENT CONTROVERSIES ON MECHANISMS CONTROLLING CARBON STORAGE IN SOILS
Delphine Derrien
- 10 a.m – 10.20 a.m SATURATION OF CLAY SURFACES BY ORGANIC MATTER: CONSEQUENCES ON PHYSICAL, CHEMICAL AND MICROBIOLOGICAL PROPERTIES
Irina Mikajlo
- 10.20 a.m – 10.25 a.m EUROPEAN JOINT PROJECT SOIL
Claire Chenu
→ 10:50 a.m -11:00 a.m : Presentation of European Joint Project Soil (in front of Poster)
- 10.25 a.m – 11.20 a.m  **Coffee Break**
 **Stand visit**
 **Group Photo**

Presented by	Poster title
Clémentine CHIROL	Effect of agricultural management practices on soil structural stability and organic matter deprotection during drying-rewetting cycles
Brahima K. SILUE	Dynamics of organic carbon storage in cacao-based agroforestry system soils in Divo.
Chiara POESIO	Influence of different agricultural managements on soil organic matter distribution and stability in topsoil and subsoil.
Nick QUIST	Changes in chemical composition of humic substances during microbial composting and <i>Agaricus bisporus</i> mycelial growth
Robin BÉGHIN-TANNEAU	Characterization by thermal analysis of soil organic matter storage induced by organic amendments
Amicie DELAHAIE	Investigating the complementarity of thermal and physical soil organic carbon fractions in mainland France
Inass ZAYANI	Soil Organic Carbon Storage in Moroccan Agroforestry Olive Orchards

- 11.20 a.m – 11.40 a.m **ORGANIC MATTER QUALITY IN ARABLE LAND AS INFLUENCE BY CLAY CONTENT AND CROPPING SYSTEM**
Cédric Deluz
- 11.40 a.m – 12 p.m **THERMO-CHEMICAL CHARACTERISATION OF ORGANIC MATTER IN AGRICULTURAL SOILS SUBJECTED TO LONG-TERM CHEMICAL OR ORGANIC FERTILISATION**
Thomas Lerch
- 12 p.m – 12.20 p.m **ORGANIC MATTER STABILIZATION IN CONSTRUCTED SOILS MANUFACTURED WITH CLAY-RICH WASTE**
Samuel Coussy
- 12.20 p.m – 12.40 p.m **WHOLE SOIL WARMING PROMOTES SUBSOIL CARBON GAIN DEPENDING ON LAND MANAGEMENT PRACTICES IN TEMPERATE CLIMATE MD.**
Zulfikar KHAN
- 12.40 p.m – 2 p.m  **Lunch Break at Sequoia building (3rd floor)**

SESSION 3: THE ROLE OF BIODIVERSITY IN SOIL ORGANIC MATTER STABILISATION AND CARBON STORAGE

Chairpersons: **Delphine Derrien & Marie-France Dignac**

- 2.00 p.m – 2.40 p.m Keynote speaker: **Petr Baldrian**
MICROBIOME OF FOREST SOILS: BIODIVERSITY, FUNCTION AND RESPONSES TO GLOBAL CHANGE
- 2.40 p.m – 3 p.m **THE ROLE OF SOIL FAUNA ON SOIL ORGANIC MATTER STORAGE DEPENDS ON ORGANIC MATTER INTERACTION WITH MINERAL MATRIX BUT NOT ONLY ON THAT.**
Jan Frouz

- 3 p.m – 3.20 p.m SOIL MACRO INVERTEBRATES ENHANCE C STORAGE IN TROPICAL SOILS FOLLOWING APPLICATION OF THE FBO TECHNOLOGY
José H. R. ARAUJO Araujo
- 3.20 p.m – 3.25 p.m THE FRENCH PROGRAM FAIRCARBON
Patricia GARNIER
→ 3.50 p.m – 4 p.m : Presentation of the French Program FAIRCARBON (in front of Poster)
- 3.25 p.m – 4.20 p.m  **Coffee Break**
 **Stand visit**
 **Poster session**

Presented by	Poster title
Abdelrahman ALAHMAD	Unveiling the Potential of Soil Prebiotics: Indigenous Microbial Recruitment for Enhanced Soil Health, Plant Growth, and Carbon Sequestration
Marie-Louise SPALINGER	The role of plant functional group diversity on soil carbon cycling processes in a simple model soil
Senta HEISS-BLANQUET	Impact of the molecular structure and microbial community features on the stability of organic components in soil
Nicolas PANNACCI	Characterizing stability and dynamics of organic matter in worm compost using Rock-Eval® analysis - preliminary results
Pascal BOIVIN	Monitoring carbon stocks in arable land: sources of errors, improvement of the one-layer equivalent soil mass method and minimum detectable change
Sergio SAIA	Role of time and cover crop on soil chemico-physical traits in an olive orchard in a semiarid area

Chairpersons: Delphine Derrien & Priscia Oliva

- 4.20 p.m – 4.40 p.m INFLUENCE OF INTRA- AND INTER-SPECIFIC PLANT BIODIVERSITY ON SOIL FUNCTIONING: SOIL RESPONSE UNDER THE USE OF EVOLUTIONARY POPULATIONS IN A ROTATION SYSTEM
Charlotte Védère
- 4.40 p.m – 5 p.m RHIZODEPOSITION PLANT-PROPERTIES AND PREVIOUS LAND-USE CONTROL BOTH MICROBIAL COMMUNITIES AND SOIL CARBON ADDITIONNAL STORAGE
Sarah Wagon
- 5 p.m – 5.20 p.m FOLLOW-UP (STABLE ISOTOPE) OF RHIZODEPOSITION AND LITTER IN SOIL MESOFAUNA UNDER 15 GRASSLAND SPECIES WITH CONTRASTING STRATEGIES
Chloé Folacher
- 5.20 p.m – 5.40 p.m IMPROVING THE SIMULATION OF CO₂ FLUXES INTEGRATING MICROBIAL BIODIVERSITY INTO A SIMPLE SOIL ORGANIC CARBON MODEL
Elisa Bruni
- 5.40 p.m – 6.40 p.m **Free Time**
- 6.40 p.m – 7 p.m Guided walk from IFPEN to the Domaine de Vert-Mont
- 7 p.m – 10 p.m  **Cocktail Reception at the Domaine of Vert-Mont**
Venue: 3 avenue Tuck Stell - Rueil-Malmaison

Friday January 26 (8.30 a.m – 2 p.m)

8.30 a.m – 8.45 a.m **Welcome coffee**

SESSION 4 : MICROBIOLOGICAL, GEOCHEMICAL AND MATTER TRANSFER INTERACTIONS: AN INTEGRATED APPROACH

Chairpersons: [Luiz Domeignoz Horta](#) and [Katell Quénéa](#)

- 8.45 a.m - 9.25 a.m Keynote speaker: [Wilfred Otten](#)
PHYSICAL PROTECTION OF ORGANIC MATTER: A BIOPHYSICAL MODEL
- 9.25 a.m – 9.45 a.m MODELLING SOIL MOISTURE CONTROL ON SOIL ORGANIC CARBON DECOMPOSITION AND LAND-ATMOSPHERE CARBON FLUXES IN A GLOBAL SCALE ECOSYSTEM MODEL
[Elodie Salmon](#)
- 9.45 a.m – 10.05 a.m PLANT DIVERSITY DRIVES POSITIVE MICROBIAL ASSOCIATIONS IN ROOTS ENHANCING CARBON USE EFFICIENCY IN AGRICULTURAL SOILS
[Luiz Alberto Domeignoz-Horta](#)
- 10.05 a.m – 10.25 a.m PSEUDOMONAS BRASSICACEARUM MINERAL WEATHERING ACTIVITY IS LINKED TO IRON HOMEOSTASIS AND CAN PARTICIPATE TO SOIL ORGANIC CARBON STABILIZATION
[Tom Girard](#)
- 10.25 a.m – 10.30 a.m THE SHARInG-MeD PROJECT: THE TRADE-OFF BETWEEN SOIL HEALTH, LAND USE, SOIL AND CROP MANAGEMENT FROM AN AGRONOMIC, ECONOMIC AND ENVIRONMENTAL POINT OF VIEW IN THE MEDITERRANEAN AREA
→ 10.50 a.m – 11 a.m : Presentation of the PRIMA SHARInG-MeD Project (in front of Poster)
[Sergio Saia](#)
- 10.30 a.m – 11.20 a.m  **Coffee Break**
 **Stand visit**
 **Poster session**

Presented by	Poster title
Elisa PELLEGRINI	Species richness of tree plantations affects pathways of carbon incorporation into soil organic matter
Carlos Rufino JUAREZ-DE-LEON	Understanding the gas exchange mechanisms between permafrost soils and the atmosphere in Daring Lake (Canada): Implications to the climate change.
Daria DERBILOVA	Organic matter in the archaeological agricultural soils of Gabon
Imran Ahammad SIDDIQUE	Soil organic carbon stock change following perennialization: A meta-analysis

Perrine COLOGON	Characterization of organic matter in peat samples with Py-GC/MS: from methodological challenges to identification of relevant molecular indicators
Olivier TAUGOURDEAU	Variability and drivers of sediments organic carbon stock in the Arcachon Bay (France)
Amal DILMI	Estimation of soil organic carbon contents in subhumid zone under the Mediterranean Baimem forest

11.20 a.m – 11.40 a.m **LAND USE DETERMINES THE COMPOSITION AND STABILITY OF ORGANIC CARBON IN EARTHWORM CASTS UNDER TROPICAL CONDITIONS**

Chao Song

11.40 a.m – 12.00 p.m **STORAGE OF DEEP CARBON IN THE BERAMBADI WATERSHED (INDIA): A COMPARATIVE STUDY BETWEEN AGROFORESTRY AND IRRIGATED AGRICULTURE**

Zoé Favaro

12.00 p.m – 12.10 p.m  Young researcher award for the best symposium poster

12.10 p.m – 12.30 p.m **Conclusion**

Key witnesses: Sophie Violette, Sophie Cornu, Abad Chabbi

12.10 p.m – 12.30 p.m **End of conference – Organising Committee**

12.40 p.m – 2 p.m ***Lunch buffet at Sequoia building (3rd floor)***
(take away available in front of amphitheater Dahlias)